

**National Aeronautics and Space Administration
Fleet AFV Program Report for Fiscal Year 1999
November 26, 2002**

This National Aeronautics and Space Administration (NASA) Fleet AFV Program Report for Fiscal Year (FY) 1999 presents the Agency's data on the number of AFVs acquired in fiscal year (FY) 1999. Forecasts for AFV acquisitions in 2000 and 2001 are not provided in this report, since actual data is provided in follow-on reports. This report has been developed in accordance with the Energy Policy Act of 1992 (EPAct) (42 U.S.C. 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388) (ECRA), and Executive Order 13149.

Prior to April 2002, NASA's contractor vehicles were not included as part of the NASA inventory or acquisitions for EPAct or E.O. 13149. When NASA determined that contractor vehicles are reportable and should be included, NASA's compliance with EPAct changed. NASA has since mandated compliance with the EPAct and E.O. 13149 to its contractors.

NASA originally calculated that AFV acquisitions at 61 percent in FY 1999. However, NASA has now recalculated the percentages to include contractor-operated vehicles. Thereby correcting the AFV acquisitions for FY 1999 to 13 percent.

Legislative Requirements

EPAct requires that 75 percent of all covered light-duty vehicles acquired for Federal fleets in FY 1999 and beyond must be AFVs (where the fleets have 20 or more vehicles, are capable of being centrally fueled, and are operated in a metropolitan statistical area with a population of more than 250,000 based on the 1980 census). Certain emergency, law enforcement, and national defense vehicles are exempt from these requirements. The ECRA amended EPAct to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPAct requirements. The head of each Federal agency must also prepare and submit a report to Congress outlining the agency's AFV acquisitions and future plans by November 13th each year. Executive Order 13149 directs Federal agencies operating a fleet of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 20 percent by the end of FY 2005 (compared to FY 1999 levels) by using alternative fuels in AFVs more than 50 percent of the time, improving the average fuel economy of new light-duty petroleum-fueled vehicle acquisitions by one mpg by FY 2002 and 3 mpg by FY 2005, and using other fleet efficiency measures.

NASA Approach to Compliance with EPAct and E.O. 13149

To achieve compliance with the legislative mandates of EPAct and E.O. 13149, NASA is planning to acquire 75 percent of new light-duty vehicles as AFVs, and use alternative fuel in these vehicles a majority of the time. As part of NASA's AFV strategy, consideration is being given to a new surcharge program that will add \$10 monthly to the cost of every vehicle leased through the General Services Administration (GSA) to help cover the higher incremental cost of many AFV models (compared to conventional vehicles). NASA will also continue to acquire light duty vehicles with a higher fuel economy, and further reduce petroleum consumption by using biodiesel fuel in most diesel vehicles.

NASA Fleet Compliance for FY 1999

Figure 1 is a graphical depiction of AFV acquisitions by NASA's fleet in FY 1999. NASA acquired 528 covered light-duty vehicles (LDVs), including contractor vehicles, in fiscal year 1999, of which 68 were AFVs. This represents a 13 percent compliance rate.

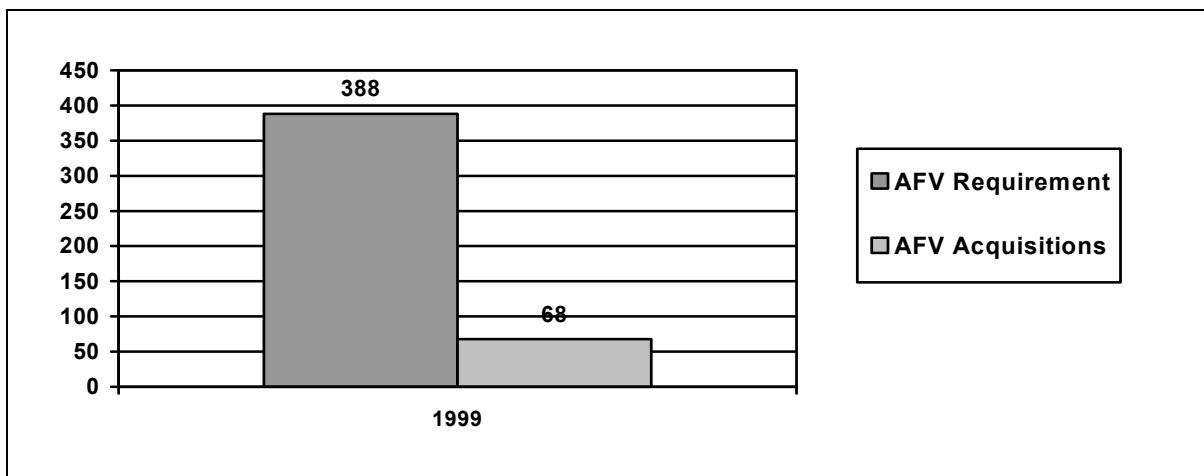


Figure 1. Summary of NASA's FY 1999 AFV Acquisitions

Alternative Fuel Used by NASA Fleets in FY 1999

Table 2 presents alternative fuel use data for NASA's fleets in fiscal year 1999. The majority of vehicles acquired by NASA and other Federal fleets are leased from GSA, and the leasing contract includes maintenance and fuel costs for the vehicles. This is accomplished by the use of a GSA credit card used to purchase alternative fuel. However, since product code standards are not uniform among suppliers of alternative fuels (e.g., ethanol or E-85), it is impossible for credit vendors to accurately track the purchase of alternative fuels with this credit card. The exception may be natural gas, which is usually purchased at a local utility refueling site, allowing the fleets to contact the utility for an accurate accounting of purchased fuel. Attachment A provides NASA's 1999 petroleum consumption report.

Table 2. NASA Fuel Use in FY 1999

Fuel Type	Quantity	Unit
CNG	9413	Gallons @ 2,400 psi, 70°F
Diesel	96,000	Gallons
Gasoline	51,000	Gallons
Propane	36	Gallons

*Estimate based on incomplete data

Petroleum Savings

Since it is difficult to calculate petroleum savings for FY 2000 and FY 2001 based upon the estimated AFV acquisitions, improvements in fuel economy, and fleet efficiency, petroleum savings are reported for only FY 1999. This information is an approximation since it is acquired from GSA historical data and NASA's FAST report.

Summary

NASA will continue to implement its strategy for complying with the requirements of E.O. 13149. NASA did not seek exemptions for fleets outside metropolitan statistical areas, nor did it apply AFV credits.

Attachment A - National Aeronautics and Space Administration

Petroleum Consumption Report

Covered Petroleum Consumption in GGE							
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	FY 1999						
	Baseline	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
Gasoline	1,528,088						
Diesel	421,478						
Diesel B-20							
TOTAL	1,949,566						
Reduction*	N/A						

* Reduction is the % reduction compared to the FY 1999 Baseline Total

Alternative Fuel Consumption (in GGE)							
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	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
CNG						
LNG						
LPG						
E-85						
Electric						
M-85						
BioDiesel (B20)						
TOTAL						
Estimated Total Fuel Used in AFVs						
AFVs						

% of Alt Fuel Use in AFVs

Average Fuel Economy of non-AFV Light Duty Vehicle Acquisitions (in mpg)							
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	FY 1999						
	Baseline	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005
Fuel Economy	18.0						
Change Compared to Baseline							